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| 09/401,872      | 09/23/1999  | RICHARD G. KETCHUM   | 09857/027001        | 5263             |

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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
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3624

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/401,872

Applicant(s)

KETCHUM ET AL.

Examiner

Narayanswamy Subramanian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 25-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 25-49 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This is in response to communication dated October 7, 2002. Claims 1-24 have been re-examined and new claims 25-49 have been examined. The restrictions, rejections and response to arguments are stated below.

#### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Original claims 1-24, drawn to an electronic market for trading of securities comprising a server process that receives quotes from the clients, aggregates the quotes and causes a total of aggregated quotes at different price levels to be displayed, classified in class 705, subclass 37.
- II. New claims 25-49, drawn to an electronic market for trading of securities comprising a server process that receives the attributable and non-attributable quotes from the clients, aggregates these quotes and causes a total of all attributable and non-attributable aggregated quotes at different price levels to be displayed, classified in class 705, subclass 37.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as indicating the current position of the market, whereas invention II is geared toward the direction the market may be headed in the short run. See MPEP § 806.05(d). Because these inventions are distinct for

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the reasons given above and the search required for claims 1-24 is different from that required for claims 25-49, restriction for examination purposes as indicated is proper.

3. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25-49 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Korhammer et al (US Patent 6278982).

With reference to claim 1, Korhammer teaches a system for trading of securities comprising: a plurality of client stations for entering quotes for securities; and a server process that receives quotes from the clients, aggregates the quotes and causes the aggregated quotes to

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be displayed for a plurality of price levels and other attributes desired by the customer on the client systems. (See Korhammer Column 4 lines 14-36). The term “system” is interpreted to include the electronic market and the term “desired attributes” is interpreted to include the total of all aggregated quotes. Totaling the quotes for each price level is inherent in the system and hence not explicitly illustrated in the reference.

With reference to claim 4, Korhammer teaches a system of claim 1 wherein the plurality of price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

With reference to claim 5, Korhammer teaches a system of claim 1 wherein the aggregate window displays aggregate interest for both sides of a market. (See Korhammer Column 8 lines 61-68).

With reference to claim 6, Korhammer teaches a system of claim 1 which includes a process to update the aggregate window. (See Korhammer Column 9 lines 27-44)

With reference to claim 10, Korhammer teaches a computer network for trading products comprising an aggregate window having a first plurality of indicators that displays totals of aggregated interest of a second plurality of market participants that exists in the electronic market at each of a third plurality of price levels of a product traded in the market. (See Korhammer Col 6 line 51 – Col 7 line 14) The step of totaling for a group of market participants is inherent in the disclosure, market makers are interpreted to include a second plurality of market participants and the computer network includes a graphical user interface for an electronic market.

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With reference to claims 16 and 17, Korhammer teaches a method of operating an electronic market for trading products including aggregating and displaying information on a product and sorted by price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also and totaling is inherent in the disclosure.

With reference to claim 19, Korhammer teaches a method of claim 17 wherein the price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

With reference to claim 24, Korhammer teaches a consolidating computer system for use in trading a product and providing aggregate data on a product sorted by a plurality of price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The other desired attributes are interpreted to include aggregate non-attributable interest in a product, totaling of interest is inherent in the disclosure and the consolidating computer system includes a computer program product residing on a computer readable media.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 2, 3, 7-9, 11, 14, 15, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhammer et al (US Patent 6278982) in view of Gutterman et al (US Patent 5297031).

With reference to claims 2, 3, and 7-9, Korhammer teaches a system of claim 1 as discussed above. The quotes displayed are for both sides of the market including the inside market and the system includes a graphical user interface at the client stations.

Korhammer fails to explicitly teach the steps of: a current quote window to be displayed in proximity to the aggregated quotes window of a graphical user interface, the current quote window including an identifier of aggregate size of all non-attributable quotes/orders at the inside price and the aggregated quotes including the two next best price levels besides the inside market quote.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window.

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This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregate size of the non-attributable quotes/orders at the inside market quote and information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

With reference to claims 11, 14 and 15, Korhammer teaches a computer network for trading products in claim 10 as discussed above. (See Korhammer Column 4 lines 19-36 and Col 6 line 51 – Col 7 line 14). The computer network includes a graphical user interface for an electronic market, totaling is inherent in the disclosure and the price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

Korhammer fails to teach the steps of a current quote window to be displayed in proximity to the aggregated quotes window of a graphical user interface, and the aggregated quotes including the two next best price levels besides the inside market quote.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See



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Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window. This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

With reference to claims 18, 20 and 21, Korhammer teaches a method of claims 16 and 17 as discussed above. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also, the step of totaling is inherent in the system and the electronic market that includes computer network for trading products includes the graphical user interface also.

Korhammer fails to teach the steps of: displaying the quotes corresponding to inside quote and the two next best price levels and displaying a window for aggregate data and a window for current quote in proximity to the aggregate window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The

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incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window. This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

8. Claims 12, 13, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhammer et al (US Patent 6278982) in view of Gutterman et al (US Patent 5297031) and further in view of Martyn (US Patent 6195647).

With reference to claims 12 and 13, Korhammer teaches a GUI for trading products including an aggregate window that displays aggregated quotes for a plurality of price levels of a product traded in the market. (See discussion of claim 10 above). The desired attributes are

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interpreted to include attributable and non-attributable quotes for each price level and totaling is inherent in the disclosure of Korhammer.

Korhammer fails to explicitly teach the steps of: displaying adjacent to the aggregate interest window a current quote window that are attributable quotes and a special quote that represents total aggregate non-attributable quotes at a current market level.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level including the current market level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and act on their analysis quickly.

Both Korhammer and Gutterman fail to teach the step of including the negotiable quotes of participants in the current quote window.

Martyn teaches the step of allowing the users to input their negotiation quote in a window of their trading terminal. (See Martyn Column 9 lines 24-28).

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It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman and Martyn in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and put in their negotiable orders quickly.

With reference to claims 22 and 23, Korhammer teaches a method of claims 16 and 17 as discussed above. The desired attributes are interpreted to include separately attributable and non-attributable interest in a product also and totaling is inherent in the disclosure.

Korhammer fails to teach the steps of: displaying adjacent an aggregate window a current quote window that may have negotiable quotes of participants in the system and a special quote representing total aggregate quotes at a current market level displayed in the aggregation window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level including the current market level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the

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disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and act on their analysis quickly.

Both Korhammer and Gutterman fail to teach the step of including the negotiable quotes of participants in the current quote window.

Martyn teaches the step of allowing the users to input their negotiation quote in a window of their trading terminal. (See Martyn Column 9 lines 24-28).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman and Martyn in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and put in their negotiable order quickly.

### ***Response to Arguments***

9. With reference to claim 1, the step of totaling quotes at each price level is old and well known in the art. Hence it is not explicitly illustrated in the references that deal with quotes in a market system. To support this position Applicants are referred to Figure 6 of Buist (US Patent 6,408,282 B1). Buist has not been relied upon for rejecting any of the examined claims.

In response to applicant's argument regarding claim 2, that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references

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themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation provided on page 5 of the previous office action would have been obvious to one with ordinary skill in the art.

In response to applicant's argument regarding claim 7, the term "quotes" as used in Korhammer refers to the "genus" of which attributable and non-attributable quotes are species. In Korhammer's invention a distinction of the various species of the same genus was not necessary and hence particular references to these quotes were not made in the invention. However the terms attributable and non-attributable quotes are inherent in the disclosure of Korhammer.

In response to applicant's argument regarding claims 12 and 22, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. special quote is the SIZE quote) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Buist (US Patent 6408282 B1)(June 18, 2002) System and Method for Conducting Securities Transactions over a Computer Network

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (703) 305-4878. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached at (703) 308-1065. The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703) 305-7687. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

N. Subramanian  
April 27, 2003

Richard Weisberger  
Primary Examiner

